REMARKS

I. Introduction

Claims 1-91 are pending in this application.[1]

Claims 19, 20, 31, 32, and 47-58 are withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a nonelected species.

Claims 1-5, 8-18, 21-30, 33-40, 44-46, 59-64, and 68-91 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tremulis et al. U.S. Patent Publication No. 2004/0049211 (hereinafter "Tremulis") in view of Solem et al. U.S. Patent Publication No. 2001/0018611 (hereinafter "Solem").

Claims 6, 7, 41-43, and 65-67 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Solem in view Tremulis and in further view of Alferness et al. U.S. Patent No. 6,908,478 (hereinafter "Alferness").

The Examiner's rejections are respectfully traversed.

II. Applicants' Reply to the Claim Rejections

The rejections of claims 1-18, 21-30, 33-46, and 59-91 are all based at least on the combination of Tremulis and Solem. Applicants respectfully submit that the rejections of these claims should be withdrawn at least because it would not be obvious to combine Tremulis with Solem as the Examiner alleges.

Tremulis is directed to methods and apparatus for connecting tissue. Tremulis describes different types of anchors. In one embodiment, a helical anchor is described. Tremulis states that helical anchors may be "used to secure or affix a stent 80, or stent-graft to a vessel wall" (para. 124).

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[1] The Examiner indicated in the Office Action summary that claims 92-95 are also pending. Claim 92-95, however, were cancelled in the previous Reply to Office Action and thus are no longer pending.

Tremulis states that the anchors are first delivered and secured to the vessel wall and then the stent is delivered and tied to the anchors using knots or clamps. Thus, the stent is "secured to the vessel wall at each of the anchor points." The stent itself does not include any other anchoring features.

Solem describes a device for treating mitral annulus dilation that uses stent-like structures that are enlargeable to abut against the side walls of the coronary sinus. The stent-like structures include hooks that "dig into the walls of the coronary sinus and into the heart" (para. 50).

The Examiner contends that it would have been obvious to combine Tremulis's helical anchors with Solem "because such a combination is disclosed within Tremulis at FIG. 75" (Office Action, p. 4). Applicants respectfully disagree. FIG. 75 of Tremulis and exemplary FIG. 14 of Solem are reproduced below.

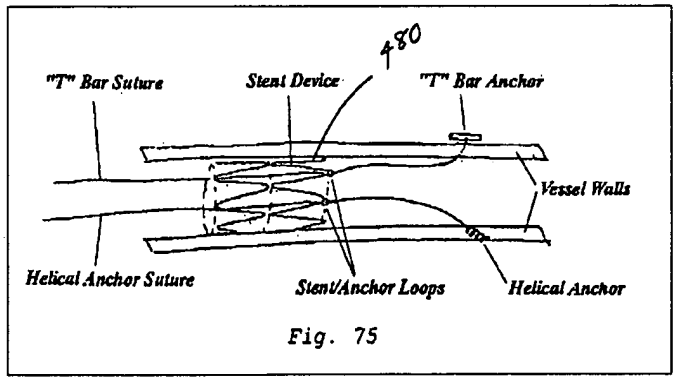

Fig. 75

Tremulis

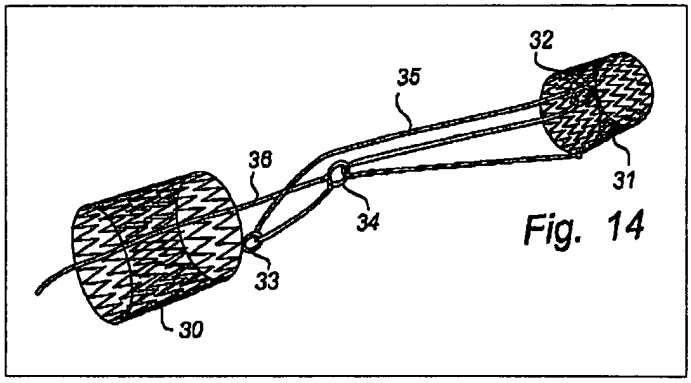

Fig. 14

Solem

As shown in FIG. 75 of Tremulis, a helical anchor is secured to a stent using a suture. The stent in Tremulis, however, is not used in combination with any other structure. Solem, in contrast to Tremulis, discloses a device (as shown for example in FIG. 14 above) that uses two stent sections and a pulley system therebetween to decrease the distance between the stent sections after the stent sections have been deployed.

Accordingly, while Tremulis discloses using helical anchors on a standalone stent, Tremulis fails to disclose using such anchors on devices that use multiple stent sections such as those shown in Solem.

The Examiner also alleges that the combination of Tremulis's anchors with Solem would "yield a usable device with predictable results" (Office Action, p. 2). There is nothing in Tremulis, however, that suggests that this would be the case. As mentioned above, the stent sections in Solem are first deployed in the body conduit and then the pulley system is used to decrease the distance between the stent sections. The force applied by the pulley system in Solem can reduce, for example, the radius of curvature of the coronary sinus and thus reduce the circumference of the mitral annulus (see the Abstract). Tremulis does not disclose the use of its helical anchors in such a system. Furthermore, Tremulis fails to disclose the use of its helical anchors with a stent that is applied with an axial force. Accordingly, Tremulis does not teach one of skill in the art that its helical anchors are capable of resisting such an axial force applied to a stent.

In view of the foregoing, the Examiner's reliance on FIG. 75 of Tremulis fails to show or suggest the combination of its helical anchors with Solem, and fails to show or suggest that such a combination would have predictable results. For at least these reasons, applicants respectfully submit that it would not be obvious for one skilled in the art to modify Solem's device to include Tremulis's helical anchors. Accordingly, applicants respectfully request that the rejections of claims 1-18, 21-30, 33-46, and 59-91 be withdrawn.

A. Additional Independent Reason for the Patentability of Claims 79-88

Claims 79-88 are patentable for an additional independent reason. Claims 79-88 specify delivery instrumentation having lateral curvature or having an elongated portion that is laterally curved. The Examiner alleges that Solem's "catheter-based system (Para. 0070) would inherently have such curvature in order to avoid damage to the surrounding tissue" (Office Action, pp. 2-3). Applicants respectfully disagree that this type of curvature meets applicants' claims.

Applicants' claims each require that the curvature either causes or tends to cause the instrumentation to angularly orient itself with respect to a body tissue conduit. There is no such angular orientation in Solem's catheter-based system. While Solem's catheter-based system would likely have curvature when the catheter is following a curved body conduit, this curvature of the catheter does not cause or tend to cause the catheter to angularly orient itself with respect to the body conduit.

In view of the foregoing, even if it were obvious to combine Solem and Tremulis, and applicants submit that it would not, the combination would still fail to show or suggest all of the features of applicants' claims 79-88. For at least this additional independent reason, applicants respectfully request that the rejections of claims 79-88 be withdrawn.

III. Claims 19, 20, 31, 32, and 47-58

Claims 19, 20, 31, 32, and 47-58 were withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a nonelected species. Applicants submit that independent claims 1, 23, and 44 are allowable generic claims. Accordingly, applicants request consideration of dependent

claims 19, 20, 31, 32, and 47-58 because they depend from allowable independent generic claims.

VI. Conclusion

For at least the foregoing reasons, applicants respectfully submit that this application is in condition for allowance.

Accordingly, prompt reconsideration and allowance of this application are respectfully requested.

Respectfully submitted,

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